



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D412-702-023
Job Sheet 194381



Part No: D412-702-023

Job Qty: 1 pcs

Part Name: Shoulder Harness, 4 Point Attachment, 5 Man Fwd Facing



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 5/1/19

Job Tracking No:

Due Date: 5/24/19

Created By: Marie Lajeunesse

Type: SOLD

Description: *orden 15991*

Note: IIN-D412-702 REV.B / DSI9559 REV.A IPP Rev:B Removed Manufacturing 05-11-08 JLM IPP Rev:C IPP rev D 06.12.14 per ecn 871 EC IPP Rev:E 07-03-14 As per DSI 9351 JLM IPP Rev.F 11.05.31 DSI 9559 EC verified by: JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Packaging 1 - Pick Kit	1 pcs		5/24/19	0.00	0.00	Packaging 1 - 1		
							Packaging 1 - 2		
							Packaging 1 - 3		
							Packaging 1 - 4		
							Packaging 1 - 5		
							Packaging 1 - 6		
							Packaging 1 - 7		
							Packaging 1 - 8		
							Packaging 1 - 9		
							Packaging 1 - 10		
							Packaging 1 - 11		
							Packaging 1 - 12		
							Packaging 1 - 13		
							Packaging 1 - 14		
							Packaging 1 - 15		
							Packaging 1 - 16		
							Packaging 1 - 17		
							Packaging 1 - 18		
							Packaging 1 - 19		
							Packaging 1 - 20		
							Packaging 1 - 21		
							Packaging 1 - 22		
							Packaging 1 - 23		
							Packaging 1 - 24		
							Packaging 1 - 25		
							Packaging 1 - 26		
							Packaging 1 - 27		
							Packaging 1 - 28		
							Packaging 1 - 29		
							Packaging 1 - 30		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S184744



Part: D412-702-023

Job No: 194381

Serial No/Batch: S184744

Revision: B/ A

Inspector:

Exp Date:

Instructions: TC STC SH04-7 Issue 3, FAA STC SR01997N

					Packaging 1 - 31	
					Packaging 1 - 32	
					Packaging 1 - 33	
					Packaging 1 - 34	
					Packaging 1 - 35	
					Packaging 1 - 36	
120 QC 4	1 pcs	5/24/19	0.00 0.00		QC 4 - 28	
					QC 4 - 58	
					QC 4 - 69	
					QC 4 - 9	
					QC 4 - 46	
					QC 4 - 68	
130 Packaging 3-1 - Stock - B4B	1 pcs	5/24/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
135 DC - 1 - B4B	1 pcs	5/24/19	0.00 0.00		DC - 1 - B4B	
					DC - 2 - B4B	
140 QC 21 - FG	1 pcs	5/24/19	0.00 0.00		QC 21 - FG - 21	
					QC 21 - FG - 70	
					QC 21 - SA - 53	
Part Op 110 - (Pick Kit)						
Descriptions: 120 - (QC4- 100% Inspect kits for completeness)						
130 - (Identify as per dwg & Stock Location: _____) Identify and pack for shipping as per PPP D412-702-023						
Location:FG029						
135 - Photocopy bluefile and create labels per PPP D412-702-023 CHG003						
140 - (QC21- Final Inspection - Work Order Release)						

009941

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN4-13A	Bolt	4 Ea (4 ea)	110-Packaging 1 - Pick Kit	5158578
D3195-041	Bracket	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5165292
D3195-043	Bracket	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5154393
D3196-1	Bar	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5184059
D3197-041	Bar	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5184361
D3268-1	Placard	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5089519
D3546-1	Clip	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5025793
D3551-11	Hook And Loop Tie	5 pcs (5 ea)	110-Packaging 1 - Pick Kit	5142191
D412-702-069	Grommet	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5012431
D4387-041	Harness Assembly	5 pcs (5 ea)	110-Packaging 1 - Pick Kit	5073697
MS24694-S152	Screw	2 Ea (2 ea)	110-Packaging 1 - Pick Kit	FM137361
MS24694-S154	Screw	2 Ea (2 ea)	110-Packaging 1 - Pick Kit	5024409

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Packaging 1 - Pick Kit	AN4-13A	4	1,268	0
	D3195-041	2	5	0
	D3195-043	2	3	0
	D3196-1	1	0	0
	D3197-041	2	2	0
	D3268-1	2	10	0
	D3546-1	2	15	0
	D3551-11	5	32	0
	D412-702-069	1	1	0
	D4387-041	5	15	0
	MS24694-S152	2	35	0
	MS24694-S154	2	38	0

Part Specifications

Specifications could not be found.

Plex 5/1/19 11:10 AM Dart.lajeunesse.marie

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

QTY -021	QTY -023	QTY -025	QTY -027	QTY -029	QTY -035	QTY -081	Part Number	Description
X							D412-702-021	Dart 13-Man Shoulder Harness Kit, 4-point
	X						D412-702-023	Dart 5-Man Forward Facing Shoulder Harness Kit, 4-point
		X					D412-702-025	Dart 4-Man Aft Facing Shoulder Harness Kit, 4-point
			X				D412-702-027	Dart 4-Man Side Facing Shoulder Harness Kit, 4-point
				X			D412-702-029	Dart 1-Man Forward Facing Shoulder Harness Kit, 4-point
					X		D214-702-035	Dart 5-Man Aft Facing Shoulder Harness Kit, 4-point, for Bell 214B/B-1
						X	D412-702-081	Dart 2-Man Aft Facing Shoulder Harness Kit, 4-point
1	1		1	1			D412-702-069	GROMMET KIT
2	2						D3195-041	BRACKET
2	2						D3195-043	BRACKET
1	1			1			D3196-1	BAR
1			1				D3196-3	BAR
1			1				D3196-4	BAR
2	2						D3197-041	BAR
4		4				2	D3198-1	FITTING
2	2						D3268-1	PLACARD
9	5		4	1			D3446-041	HARNESS ASSEMBLY, 4 POINT
4		4				2	D3446-043	HARNESS ASSEMBLY, 4 POINT
					5		D3446-045	HARNESS ASSEMBLY, 4 POINT
13	5	4	4	1	5	2	D3551-11	HOOK AND LOOP TIE
2	2						D3546-1	CLIP
4		4				2	AN4-5A	BOLT
4	4						AN4-13A	BOLT
8		8				4	AN4-20A	BOLT
20		20				10	AN960JD416	WASHER (OR NAS1149D0463J)
12		12				6	MS21042L4	NUT (OR MS21042-4)
8	2		6	2			MS24694-S152	SCREW
8	2		6	2			MS24694-S154	SCREW

QTY -069	Part Number	Description
X	D412-702-069	GROMMET KIT
24	D3619-2	GROMMET
1	D3619-2T1	HOLE PUNCH
1	D3619-2T2	STRIKER BLOCK
1	D3619-2T3	PUNCH
1	D3619-2T4	DIE

DART SERVICE INSTRUCTION

TO AMEND IIN-D412-702-1 REV. A,
AND ICA-D412-702 REV. 4 OR EARLIER APPROVED REVISIONS

REF. TCCA STC: SH04-7
REF. FAA STC: SR01997NY
REF. EASA STC: EASA.IM.R.S.00710

PURPOSE

The purpose of this DSI is to outline the replacement of existing D3446-041/-043 Shoulder Harnesses with the new and improved D4387-041/-043 Shoulder Harnesses.

CHANGE

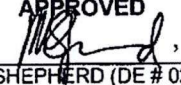
For the following Kits, the D4387-041 and D4387-043 Shoulder Harnesses respectively replace the D3446-041 and D3446-043 Shoulder Harnesses as follows:

Old Harness P/N	Used On	New Harness P/N	Effectivity
D3446-041	D412-702-021	D4387-041	CHG 003 and subsequent
	D412-702-023		
	D412-702-027		CHG 002 and subsequent
	D412-702-029		
D3446-043	D412-702-021	D4387-043	CHG 003 and subsequent
	D412-702-025		CHG 002 and subsequent

Customers who want to upgrade their shoulder harnesses may replace their existing D3446-041/-043 with D4387-041/-043 per this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 11.05.09
CERT. NO.: SH04-7
ISSUE NO.: 3

A	NEW ISSUE	MB	11.05.09
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9559	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		HARNESS CHANGE	NTS
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